

Title (en)

STRAIN MONITORING SYSTEM AND APPARATUS

Title (de)

BELASTUNGSÜBERWACHUNGSSYSTEM UND GERÄT

Title (fr)

SYSTEME ET DISPOSITIF POUR LE CONTROLE DE SOUCHE

Publication

EP 1773186 A2 20070418 (EN)

Application

EP 05770030 A 20050708

Priority

- US 2005024340 W 20050708
- US 58659304 P 20040708

Abstract (en)

[origin: WO2006010037A2] A system for monitoring strain as an indicator of biological conditions, such as spinal fusion, glucose levels, spinal loading, and heart rate. The system includes an inter-digitated capacitor sensor, and RF transmitter, and an associated antenna, all of which are microminiature or microscopic in size and can be implanted in a biological host such as a human or animal. An inductively coupled power supply is also employed to avoid the need for implantation of chemical batteries. Power is provided to the sensor and transmitter, and data is transmitted from the sensor, when an external receiving device, such as a handheld RF ID type receiver, is placed proximate the location of the implanted sensor, transmitter and inductively coupled power supply. The implanted sensor, transmitter and inductively coupled power supply can be left in place permanently or removed when desired.

IPC 8 full level

A61B 5/00 (2006.01)

CPC (source: EP US)

A61B 5/0031 (2013.01 - EP US); **A61B 5/0205** (2013.01 - US); **A61B 5/076** (2013.01 - US); **A61B 5/103** (2013.01 - US); **A61B 5/1036** (2013.01 - US); **A61B 5/1126** (2013.01 - EP US); **A61B 5/14532** (2013.01 - EP US); **A61B 5/14546** (2013.01 - EP US); **A61B 5/4566** (2013.01 - EP US); **A61B 5/6846** (2013.01 - US); **A61B 5/686** (2013.01 - US); **A61B 90/98** (2016.02 - EP US); **A61B 5/024** (2013.01 - US); **A61B 90/06** (2016.02 - EP US); **A61B 2090/064** (2016.02 - EP US); **A61B 2560/0219** (2013.01 - EP US); **A61B 2562/0261** (2013.01 - EP US); **A61B 2562/028** (2013.01 - EP US); **A61F 2/4455** (2013.01 - EP US); **A61F 2/4657** (2013.01 - EP US); **A61F 2002/30668** (2013.01 - EP US); **A61F 2250/0001** (2013.01 - EP US)

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2006010037 A2 20060126; WO 2006010037 A3 20070125; EP 1773186 A2 20070418; EP 1773186 A4 20090812; JP 2008505715 A 20080228; JP 4977020 B2 20120718; US 2007276201 A1 20071129; US 2007276294 A1 20071129; US 2012136229 A1 20120531; US 2012136278 A1 20120531; US 2014066814 A1 20140306; US 2014163423 A1 20140612; US 2015265213 A1 20150924; US 2017079555 A1 20170323; US 8066650 B2 20111129; US 8070695 B2 20111206; US 8529474 B2 20130910; US 8622936 B2 20140107; US 8721570 B2 20140513; US 9060743 B2 20150623; US 9510785 B2 20161206

DOCDB simple family (application)

US 2005024340 W 20050708; EP 05770030 A 20050708; JP 2007520554 A 20050708; US 201113304666 A 20111127; US 201113306562 A 20111129; US 201313973355 A 20130822; US 201414147299 A 20140103; US 201514725286 A 20150529; US 201615357054 A 20161121; US 62097307 A 20070108; US 62098007 A 20070108